

# Department of Energy

## **Ohio Field Office** Fernald Area Office

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**DOE-0170-98** 

Mr. James A. Saric, Remedial Project Manager U.S. Environmental Protection Agency Region V-SRF-5J 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager **Ohio Environmental Protection Agency** 401 East 5th Street Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

CONTRACT DE-AC24-920R21972, DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE FOR AREA 1, PHASE II

The purpose of this letter is to transmit, for your review and approval, the draft Integrated Remedial Design Package (IRDP) for Area 1, Phase II (A1PII). This submittal is in accordance with the Operable Unit 5 (OU5) Remedial Design Work Plan (RDWP) and is consistent with the draft Sitewide Excavation Plan (SEP). This IRDP consists of the following:

- Implementation Plan
- **Construction Drawings**
- **Technical Specifications**

This Implementation Plan addresses the area-specific Remedial Design/Remedial Action (RD/RA) process steps discussed in the SEP (i.e., predesign investigations, remedial design, remedial action, precertification, and interim grading activities). A Certification Design Letter for Sector 1 is also submitted with the IRDP as further discussed. Certification and final restoration (including follow-on activities) will be conducted separately and are not included.

#### Implementation Plan Activities

The Implementation Plan contains the following appendices:

- Design Criteria Package (DCP)
- Predesign Investigation Supporting Information
- Surface Water Management Plan
- Systems Plan
- At-and Below-Grade Structures and Facilities
- Integrated Measurement Approach
- Earthwork and Impacted Material Calculations

The DCP (Appendix A) reflects use of a 10-year, 24-hour storm for design of the surface water management system. This is consistent with the design of the storm water retention basins and Area 1 Phase I. The Applicable or Relevant and Appropriate Requirements (ARAR) and To Be Considered (TBC) criteria for A1PII, included in the DCP, are consistent with the SEP.

Predesign Investigation Supporting Information (Appendix B) provides backup for the discussions in Section 2 of the Implementation Plan.

The Surface Water Management Plan (Appendix C) reflects a holding tank/pumped conveyance system for water collected in the Sewage Treatment Plant (STP) excavation. For rainfall in excess of 2 inches over a 24 hour period, the STP excavation is used for additional stormwater storage.

The Systems Plan (Appendix D) addresses start-up requirements for the Surface Water Management System.

At-and Below-Grade Structures and Facilities (Appendix E) addresses the structures appurtenant underground facilities within A1PII.

The Integrated Measurement Approach (Appendix F) is based on recent discussions with project stakeholders and presents the overall strategy to monitor the excavation.

The Earthwork and Impacted Material Calculations (Appendix G) address volume estimates for remedial activities in each sector. These quantities will be further refined for the Certified for Construction (CFC) submittal.

## **Construction Drawings and Technical Specifications**

The enclosed construction drawings and technical specifications represent the site preparation/excavation phase of the A1PII project and have a 90% status. We are still working one design interface issue with the On-Site Disposal Facility (OSDF) Project. The invert of the conveyance channel shown on Drawing No. 92X-5900-G-00466 may be raised several feet so that it remains within (i.e., is not deeper than) the proposed OSDF excavation.

#### **Certification Design Letter**

The certification design letter establishes proposed CU boundaries for Sector 1. Once we gain your concurrence on the certification concept, we will establish the sampling points consistent with provisions in the SEP. This will mitigate potential changes, as we intend to field survey the sample locations prior to finalizing the letter report.

Also included with this submittal for your review is a Geotechnical Sampling and Testing Plan to develop a borrow area near the southeast corner of the Fernald Environmental Management Project (FEMP) to supply backfill for the STP excavation. We anticipate that the soils in this area will be similar to the soils in the adjacent OSDF Borrow Area.

Please note that expeditious review of the Sector 1 Certification Design letter is critical to our overall site plan, as borrow material is to be hauled for OSDF liner construction commencing on June 30, 1998. Sector 1, exclusive of the Trap Range, needs to be certified in advance of that action. Likewise, review of the specification for stabilization of lead contaminated soil in the Trap Range is critical to our plans.

If you have questions regarding this submittal, please contact Robert Janke at (513) 648-3124.

Sincerely,

FEMP:Nickel

Johnny W. Reising Fernald Remedial Action

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**Project Manager** 

**Enclosure: As Stated** 

#### cc w/enc:

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bcc w/enc:

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